

REMARKS

Claims 1-26 were rejected under 35 U.S.C. § 103(a) as obvious over Strickland et al. (U.S. 5,867,806) in view of Howells et al. (U.S. 4,556,884). Applicant traverses the rejections and has amended independent claims 1, 10 and 19 to further clarify the invention.

To establish obviousness under 35 U.S.C. § 103, "all the claim limitations must be taught or suggested by the prior art." MPEP 2143.03 (citing *in re Royka* 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974)). Neither Strickland et al. nor Howells et al. (alone or combined) teach or suggest all the limitations of the claimed invention.

The claimed invention requires the calculation of a parameter representative of a formation property using log data obtained with a first well tool disposed within the borehole; modeling log data, representative of log data theoretically obtainable with a second well tool disposed within the borehole, from the calculated parameter; and comparison of the log data obtained with the second well tool disposed within the borehole against the modeled log data to determine the formation characteristic.

Strickland et al. describes an inversion technique that provides enhanced resolution and correction for shoulder bed effects using a propagation type logging tool. Strickland et al. proposes an iterative technique that uses log data acquired with the logging tool to simulate a log value, and then compares the simulated log to the actual acquired log data. The method continues adjusting the simulated log in its iterations until there is a match between the simulated and actual logs to produce a corrected log. (col. 8, line 30 – col. 9, line 15). Thus, Strickland et al. is clearly limited to a modeling technique that uses simulated and actual data pertaining to the same tool. Expressly missing from Strickland et al. is any description of formation parameter calculation from a first well tool, modeling of log data representative of log data theoretically obtainable with a second well tool using the calculated parameter, and comparison of the log data obtained with the second well tool against the modeled log data.

Howells et al. also fails to teach or suggest all the limitations of the claimed invention. Howells et al. is clearly aimed at a logging technique that provides more accurate and precise depth measurements, correcting for anomalies occurring in the depth indications with a single tool. Though Howells et al. describes a logging tool adapted to make various types of subsurface measurements, it does not offer any guidelines or suggestions that would lead one of ordinary skill in the art to perform the calculation and modeling techniques of the present invention.

The Office Action suggests that it would have been obvious to one of ordinary skill in the art to combine Strickland et al. with Howells et al. because laterolog and induction type measurement tools are known in the art and provide different measurement methods to determine the presence of oil. As explained above, these references (alone or combined) do not teach or suggest all the limitations of the claimed invention. Even if they had, Applicant does not believe that this broad allegation meets the requirement to provide a specific motivation to combine the

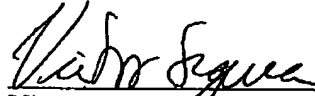
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references without the impermissible use of hindsight. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132 (Fed. Cir. 1985) (It is error to reconstruct the patentee's claimed invention for the prior art by using the patentee's claim as a blueprint).

Applicant respectfully submits that claims 1, 3-10, 12-19 and 21-26 is allowable and requests withdrawal of the rejections. If the Examiner believes that a telephone conference would be advantageous in advancing the prosecution of this application, he is invited to call the undersigned at (281) 285-4562.

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